REMARKS

Claims 1-3, 5, 6, and 8-21 are pending. By this Amendment, claims 4 and 7 are cancelled, claims 1 and 13 are amended and new claim 21 is added. The amendment to claim 1, and new claim 21, are supported by the specification, for example, from page 7, line 17 to page 8, line 15. The amendment to claim 13 is supported by the specification at, for example, Figs. 1-3. No new matter has been introduced by the present Amendment. Claims 1-3, 5, 6 and 8-20 currently stand as rejected. Applicants respectfully request reconsideration of the rejections based upon the following comments.

Rejections Under 35 U.S.C. § 102

A. Rejection Under U.S. Patent 5,121,950

The Examiner rejected claims 1-3 and 11 under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent 5,121,950 to Davidian (the '950 patent). More specifically, the Examiner asserted that the '950 patent discloses "a fire resistant door comprising a frame, a door hingedly connected to the frame and a heat activated self closing mechanism including a firing pin, a fusible link plug, and a slave pin spaced apart from the firing pin by the fusible link plug." "A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." See MPEP § 2131. Applicants submit that the '950 patent does not disclose a fire resistant door having "a collapsible supporting member" and a trigger mechanism, "wherein the trigger mechanism interacts with the collapsible supporting member to collapse the collapsible supporting member", as is now in amended claim 1. Applicants respectfully request reconsideration of the rejection in view of the following comments.

The '950 patent relates to a pivoted door assembly with a fire actuated latching member. More specifically, the '950 patent discloses a door having fire actuated latch bolt assemblies that can retain the door within a door opening in the event of a fire. See '950 patent specification from column 1, line 57 to column 2, line 27. In other words, the latch bolt assemblies of the '950 patent are located within the door and fire into the surrounding door frame, which helps secure the door to the frame during a fire. However, the '950 patent does not disclose a fire door comprising a collapsible supporting member adapted to hold the door spaced from the frame in an open position and a heat activated self closing mechanism comprising a trigger mechanism, wherein the trigger mechanism interacts with the collapsible supporting member to collapse the collapsible supporting member. In contrast, Applicants' invention, as claimed in independent claim 1, relates to a fire door comprising a collapsible supporting member adapted to hold the door spaced from the frame in an open position and a heat activated self closing mechanism comprising a trigger mechanism, wherein the trigger mechanism interacts with the collapsible supporting member to collapse the collapsible supporting member. Since the '950 patent does not disclose this feature of Applicants' claimed invention, the '950 patent does not anticipate Applicants' claimed invention.

Since the '950 patent does not anticipate Applicants' invention, as claimed in independent claim 1, Applicants respectfully request the withdrawal of the rejection under 35 U.S.C. § 102(b) as being anticipated by the '950 patent.

B. Rejection under U.S. Patent 5,565,274

The Examiner rejected claims 13, 14 and 20 under 35 U.S.C. § 102(b) as being anticipated by U.S. patent 5,565,274 to Perrone, Jr. et al. (the '274 patent). More specifically, the Examiner asserted that the '274 patent discloses "a fire resistant door comprising a frame, a door hingedly connected to the frame, the door having a bottom wall, a top wall, and side walls,

the bottom wall having an outside surface and the top wall having an outside surface, and a layer of intumescent material on the outside surface of the bottom wall, and the outside surface of the top wall being clear of additional insulating material." However, Applicants submit that the '274 patent discloses a fire door having a layer of cementitious material on the outside surface of the top wall. Applicants respectfully request reconsideration of the rejection based upon the following comments.

The '274 patent discloses a fire door having a bottom wall 47e and a top wall 47b. As shown in Fig. 3 of the '274 patent, which is a cross-section of Fig. 2 taken along line 3-3, the outside surface of top wall 47b is covered with cementitious material 54. Thus, the outside surface of top wall 47b is not free of additional insulating materials since the top wall is disclosed as being covered with a cementitious layer. In contrast, Applicants' invention, as claimed in independent claim 13, relates to a fire resistant door comprising a door frame, a door hingedly connected to the door frame, the door having a top wall that is clear of additional insulating materials. Since, this feature of Applicants' claimed invention is not disclosed by the '274 patent, the '274 patent does not anticipate Applicants' claimed invention.

Since the '274 patent does not anticipate Applicants' invention, as claimed in independent claim 13, Applicants respectfully request the withdrawal of the rejection under 35 U.S.C. § 102(b) as being anticipated by the '274 patent.

Rejections Under 35 U.S.C. § 103

The Examiner rejected claims 4-10 and 12 under 35 U.S.C. § 103(a) as being unpatentable over the '950 patent in view of the '274 patent. More specifically, the Examiner asserted that, "it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide collapsible supporting member having a gas spring, a pressurized cylinder core and a pressure release valve, threaded hollow stud and the trigger mechanism to

interact with the collapsible supporting member as taught by Perrone with the fire door of Davidian....". Applicants submit that the Examiner has not established a prima facie case of obviousness, and thus Applicants respectfully request reconsideration of the rejection based upon the following comments.

In order to establish a prima facie case of obviousness, "the prior art reference (or reference when combined) must teach or suggest all of the claim limitations." See MPEP § 2143. Additionally, "there must be a reasonable expectation of success." Id. Moreover, the reasonable expectation of success must be found in the prior art, and not based on the Applicants' disclosure. See MPEP § 2142.

As discussed above, the '950 patent does not disclose a fire door having a collapsible supporting member adapted to hold the door spaced apart from the frame in an open position. Additionally, the fire actuated latch assemblies of the '950 patent function to secure the door to the surrounding door, and therefore the fire latch assemblies are designed to fire from inside the door into the surrounding door frame and are not designed to interact with a collapsible supporting member. The '274 patent does not disclose a heat activated self closing mechanism comprising a trigger mechanism including a firing pin, a fusible link plug and a slave pin spaced from the firing pin by the fusible link plug. Thus, neither the '950 patent nor the '274 patent, alone or in combination, disclose or suggest a fire door comprising a collapsible supporting member and a heat activated self closing mechanism comprising a trigger mechanism including a firing pin, a fusible link plug and a slave pin, wherein the trigger mechanism interacts with the collapsible supporting member to collapse the collapsible supporting member. In contrast, Applicants' invention, as claimed in independent claim 1, relates to a fire door comprising a collapsible supporting member and a heat activated self closing mechanism comprising a trigger mechanism including a firing pin, a fusible link plug and a slave pin, wherein the trigger mechanism interacts with the collapsible supporting member to collapse the collapsible

supporting member. Since the combination of the '950 patent and the '274 patent fails to disclose all of the features of Applicants' invention, as claimed in independent claim 1, the combination of the '950 patent and the '274 patent does not render Applicants' claimed invention prima facie obvious.

Moreover, even assuming arguendo that the combination of the '950 patent and the '274 patent disclose or suggest all of the features of Applicants' claimed invention, there is no reasonable expectation of success of combining the '950 patent with the '274 patent to obtain Applicants' claimed invention. As described above, the fire actuated latch assemblies of the '950 patent function to secure the door to the surrounding door frame, and are not designed to interact with a collapsible supporting member. Additionally, neither the '950 nor the '274 patent disclose or suggest how one could modify the fire actuated latch assemblies of the '950 patent to interact with the collapsible supporting member of the '274 patent. Thus, there is no reasonable likelihood of success in combining the '950 patent and the '274 patent to obtain Applicants' claimed invention, and therefore the combination of the '950 patent and the '274 patent does not render Applicants' claimed invention, as claimed in independent claim 1, prima facie obvious.

Since neither the '950 patent nor the '274 patent, alone or in combination, render Applicants' invention, as claimed in independent claim 1, prima facie obvious, Applicants' respectfully request the withdrawal of the rejection under 35 U.S.C. § 103(a) as being unpatentable over the '950 patent in view of the '274 patent.

The Examiner also rejected claims 13 and 15-19 under 35 U.S.C. § 103(a) as being unpatentable over the '950 patent in view of the '274 patent. As discussed above, the '274 patent discloses a fire door having a layer of cementitious material on the outside surface of the top wall. Additionally, the '950 patent does not disclose or suggest a horizontally hinged fire door wherein the outside surface of the top wall is clear of additional insulating materials. In contrast, Applicants' invention, as claimed in independent claim 13, relates to a fire resistant

door wherein the door is horizontally hinged to the fame and wherein the outside surface of the top wall is clear of additional insulating materials. Since the combination of '950 patent and the '274 patent does not disclose all of the features of Applicants' invention, as claimed in independent claim 13, the combination of the '950 patent and the '274 patent does not render Applicants' invention prima facie obvious.

Since the combination of the '950 patent and the '278 patent does not render Applicants' invention, as claimed in independent claim 13, prima facie obvious, Applicants respectfully request the withdrawal of the rejection under 35 U.S.C. § 103(a) as being unpatentable over the '950 patent in view of the '274 patent.

CONCLUSION

In view of the foregoing, it is submitted that this application is in condition for allowance. Favorable consideration and prompt allowance of the application are respectfully requested.

The Examiner is invited to telephone the undersigned if the Examiner believes it would be useful to advance prosecution.

Respectfully submitted,

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